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The Reconstruction of the Adolescent Period of our Canadian Girl*

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IT affords me a great deal of pleasure, I can assure you, to have the honour of addressing so representative and cultured an audience as it is my privilege to look upon to-day. It is somewhat difficult to imagine any association or society so important as that which takes as its chief end the consideration of the public health. It is not necessary to dilate upon its importance, for our very presence here, to-day, some of us from thousands of miles away, sufficiently attests it.

The subject I have chosen to call your attention to as briefly as is possible, and especially the proposal it carries with it, may be somewhat unique; but it is one which has been in my mind for ten or more years. I have hesitated until now to present it, because I felt that in consequence of its very uniqueness or novelty, before I ventured to express it publicly, I should in justice to both you and myself, make fairly sure that the change I shall suggest is founded upon solid ground, and is capable of being put into practical effect. So convinced have I become of its importance and practicability, that I am sanguine that before I have finished, as a result of even this fragmentary and broken presentation of it, that you will be inclined to agree with me, both as to its necessity and its possibility of accomplishment. That my proposal will be criticized and probably modified, is to be expected, but because I conscientiously believe it is soundly based, and that it is no whim of the moment with me, I confidently rely upon your general approbation.

Briefly then, permit me to lay before you a few reasons why some re-arrangement or reformation of the curriculum, for the education of our "Canadian Girl" should be made. First, let me remind you, that the primary stage of the developmental period of man (I refer to the

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gestation period) is nature's most wonderful work; not only such, but upon the mental, moral and physical eligibility of those entering into its consummation depends, absolutely, the stability of the future of Canada's national fabric.

Again, at this unique period of our nation's history when so much is depending upon conservation, we must look especially to its greatest asset—its manhood and womanhood—and lend every effort in the power of man to conserve its resources. Particularly is this true when we realize how of late its ranks have been devastated by both war and pestilence, and above all, when we recognize the fact, that in times of peace and times of freedom from epidemic and pestilence, we have going on in a latent manner that which is marring the physique of our Canadian citizenship, and depleting our population by death; all of which have their origin from sources that can and should be prevented.

So let us endeavour, if you please, to arrive at one of the fountain-heads of such conditions, and if possible strike the blow that will result in the desired change. I think that you will agree with me, that it is conceded by all that woman plays by far the more important part in the above referred to problem. Then if, as we have intimated, the cradle of civilization is nature's most important work, and so much of the future well-being of Canada depends upon its perfection, may I not ask what is being done to protect, perfect and enhance this great asset? The destiny of the nation depends upon the answer we may be able to make to this question. In suggesting such an answer, let me put another question. Are we not infringing, by our present methods of education, upon the physical development of our girl life, at a time when every attention should be given it?

Nothing is more common with physicians than to find that during the few weeks preceding the closing of the school term, we are visited by mothers having with them their daughters, who have been cramming for final examinations and in the majority of instances the story related is something like this—"Doctor! I have brought Mary to you to see if you cannot do something for her. You know she has been leading her class nearly all of the term; she is competing for the Governor-General's Medal, and we are *so* anxious that she be successful; but of late it is so hard for her to study, her head aches, she has no appetite, we cannot force her to partake of food, her bowels are constipated, she is so nervous, Doctor; she cannot get to sleep, sometimes for hours after she retires. Of late her periods have been irregular or have stopped, or have not appeared, as yet; she is so white and frail looking. We also notice her twitching her face, eyelids and mouth a lot, and of late tossing her head to and fro and we are fearful, if something is not done, she will not hold out and we do, so much, want her to take the honours she has worked so hard for all winter".

We take a look at the girl and find that in almost every particular the word picture of the mother quite correctly describes the condition found. We find she is truly very anaemic in appearance, tongue quite heavily coated, generally far below the average weight. We notice, too, the nervous symptoms spoken of by the mother, simulating a beginning chorea, or St. Vitus dance. Upon examination of the heart, which she complains about as beating rapidly at times, there is revealed a functional murmur, and suspecting from her headache some possible eye complications, we have her see an oculist, who reports severe condition of astigmatism. At the same time, bear in mind, nature is doing her best to shapen and perfect her scheme of physical economy. Therefore I think we can well afford to spend a few moments discussing this questionable condition which we find obtains.

Reflecting upon such cases as I have attempted to detail, there is nothing in the whole range of life which can compare in importance with the potential powers of reproduction possessed by the girl of, say, fourteen years of age. This has been well called a critical age of woman's life, the age of forty-five being considered as the other. But when the two epochs are compared the latter falls into almost absolute insignificance when contrasted with the former. The one is positive, the other, negative. The one contains the promise and our only assurance of the continuance of the human race. The other clearly signifies that whether for weal or woe, whether fulfilling destiny as part of a collective unit, or of having existed merely as an individual and a self-centred entity, that the die of life has been cast, that its course so far as the continuance of the race is concerned has been irrevocably fixed, recorded and ended, and that it ceases to be any longer a possible factor in propagation.

It is far different from the prospect and possibilities that lie before the girl at fourteen; then, "all the world is before her", with many and varied duties it is true, but with one supreme and surpassing function. Words are utterly inadequate to estimate the value of such a young life. Infinite care and toil has been expended to bring this young life to such a stage; to protect it against disease; to guide its opening intelligence; to direct and educate its moral faculties; to inculcate knowledge, and to insure its happiness while in its dependent condition. At fourteen or thereabouts, however, arrives an influence which we can neither abrogate nor postpone. It is as inevitable and immutable as is the rising of the sun or the falling of the rain.

But though inevitable, it must not be forgotten, that in essence it is an influence and tendency only, and its beneficent effects may be thwarted and distorted by carelessness, by thoughtlessness, by over-anxiety for mental as contrasted with physical perfection, and above all by ignorance on the part of those in a governing relation to the young

girl of the fundamental principles of natural law. It is true these thwarting factors may originate in causes, seemingly uncontrollable by us. Chronic defects, disease and deformity may have supervened or have existed from the beginning, despite all our efforts to the contrary, and the influence referred to may be so checked and modified as to be practically nugatory in its results. But it is beyond question that such misadventures from such causes bear but a small proportion to those produced inadvertently through the lapses just referred to on the part of those who have the conduct of the child in charge. In short, the artificial methods, long thought essential by the whole civilized world, of ignoring, in a measure, nature's process, and subjecting the girl between fourteen and sixteen to a more or less rigorous mental training in which her physical system takes but a very minor and secondary place, is in my opinion by far the most fruitful cause of the many lamentable results in the life of the adult woman.

I do not presume to say that this danger has not been apprehended already. I freely admit that it has been anxiously thought of and sedulously guarded against. School hours have been shortened, sometimes to the point of absurdity; compulsory physical exercise has been adopted; in many instances the food and clothing of the child have been placed under official supervision; school houses have been built and maintained on the most correct principles of sanitation and hygiene; home study has been reduced to a minimum; medical inspection has been introduced, and numberless other safeguards set up to conserve the physical health of the child. But their very multiplicity displays at once not only the recognition of the absolute need of physical conservation and development, but also the consciousness of every educational authority that constant and devoted attention to mental culture in our schools in the girl of fourteen, tends in the most positive way to the deterioration of her physical powers. It seems evident to me, then, in the interests of the future mother and of our nation, that it has become absolutely essential to substitute an intercalary period between the girl's school years—of fourteen and sixteen. This period should be devoted to dealing specifically with all matter peculiar to woman and womanhood. It will be denied by no one, that because of diffidence and false modesty, we frequently permit our children to be launched on the ocean of life, without having pointed out to them upon its chart, the many rocks, reefs and sunken sand bars upon which their moral and physical lives are not infrequently wrecked, and not only their own lives but those of generations yet unborn.

Such a course, which should be mainly clinical and observational, rather than didactic and by mere precept, would throw around our girls a protecting mantle as regards their moral and physical welfare. We

all know that "knowledge is power" and that "forewarned is forearmed"—but knowledge in order to be power must be the right kind of knowledge, and the armour we would give our girls must be proof against the shafts of ignorance, of evil-design and of unhappy circumstance and environment. Instead, therefore, as is so often the lamentable case, that our sweet girls receive their knowledge of many physical facts, distorted to their ruin and irretrievable disgrace, at the hands of some criminal, how much more logical it would be that they (each of them) should become possessed of this information through legitimate channels and with benevolent intent. So I would have our Canadian girls who have arrived at the age of fourteen, and who by that time would have completed their course of strictly elementary literary education, enter upon a curriculum conducted by a woman of high moral character, possessing maternal qualities and expert in the subjects to be taught.

These subjects would line up somewhat as follows:

1. The anatomy and physiology of their own systems, and information concerning certain diseases to which they are subject.

2. Domestic science in its entirety.

3. Personal hygiene and household sanitation.

(1) Thus our girls would learn minutely the structure of their bodies, and would become possessed of useful knowledge concerning the various organs and their respective functions and the care necessary to maintain them in a healthy condition. They would become aware of the frightful character and deadly effect of certain diseases—how they are communicated—and taught to beware of them at all hazards.

(2) Domestic science in its entirety should be instilled both by precept and practice. The extent and importance of it are well exemplified by, for instance, McDonald College, where I think, some two whole years are devoted to it alone. Furnished with such knowledge, probably the greatest asset any woman can bring to household duties, many difficulties now seeming almost insuperable, such as that connected with the domestic servant, would fade and vanish away.

(3) The subject of personal hygiene and household sanitation in such a course would be altogether indispensable. Ventilation, that question upon which so much depends and concerning which there is so much wrong information, would become a straightforward and well-regulated measure of every household. Temperature, so closely allied to ventilation, and so important both in sickness and in health as a curative and preventive measure, would no longer be a haphazard matter. The bath-room and its accessories, instead of often being the plague spot of the household to be sedulously avoided except upon extreme necessity, would become sanitarially safe. The plumber no longer would be supreme in his mandates. His knowledge, or as sometimes happens,

the want of it, would be supplemented by the person most interested and reiterated visits of these useful people to amend amendments and to undo to-day what was done yesterday, would be of less frequent occurrence.

Some knowledge of and good taste in architecture would be imparted. In case of the fortunate husband building a new house, reasonable and common sense action with some artistic perception in his wife would be available in the location and furnishing of the rooms, and further than that, before and during the erection of the house, her acquired knowledge would see to it that her intended home would possess these three fundamental essentials of every healthy house, viz., proper drainage, proper light and sufficient space. Cooking and all that pertains to it would approach its ideal. Some science could be intermingled with what is now purely an art; often indeed, not more than a rule of thumb. That sour bread is the mother of divorce and an untidy and malodorous kitchen the greatest friend of the drinking saloon is not the language of the extremist, but rather that of reason and sound observation. In many a home the fibres of domestic misunderstanding and mutual irritability are kindled and kept perpetually alight because of the lack of the precise knowledge domestic science has to impart.

But a fourth service, not yet enumerated, claims our attention, a service surpassing, if possible, all three together of those adverted to—this is the care of the baby. I here declare as a physician of some twenty-five years' standing, and I am sure my experience is in consonance with that of my colleagues, that in presenting a mother with her first baby, and almost without reference to her social station, one might almost as well present her with a copy of Homer in the original and expect her to make a rational use of it—so little does she know of the real care demanded by the young infant. This is an appalling fact, and while sanitarians and practitioners of state medicine are everywhere looking for means to check infant mortality, this lamentable condition largely remains, rendering our best efforts of comparatively small value and little effect. The babies, therefore, suffer and often die simply from 'want of knowledge on the part of those most greatly interested in their preservation, and who are at all times ready, if necessary, to sacrifice even life itself on their behalf.

Breast or bottle feeding, for example, here instantly comes to the surface. What proportion of young mothers or mothers of any age or puerperal experience, for that matter, knows that the chances of survival through infancy of a breast-fed baby are nine to one in comparison with the child fed from the bottle? What again respecting the regularity of nourishment, which is one of the very foundation stones in the edifice of infant conservation? The bathing of the baby, its need of pure air,

ventilation, its sleeping quarters and its sleeping accessories, the danger of the deep and confined crib in which the babe is often poisoned by its own emanations, necessary outdoor exposure—how important these are, and yet how sadly lacking in the information regarding them are the actual or prospective mothers. Then again when illness threatens in either mother or child, rendering the use of cow's milk necessary, what proportion of mothers know anything of the chemistry of the latter? Or, when the proper age has been attained, how many understand the art of changing the food of the infant from its maternal source to the ordinary one? What mother to-day is capable of differentiating in the slightest, with any attempt at reason, between healthy and the varieties of unhealthy stools? All of these points, and there is not one of them but what is vital, together with numberless others, might and should be taught the potential mother, in her most mentally receptive period, one during which nature is busily at work almost monopolizing her attention, if not interfered with. Now who is responsible for this grievous lack, if not the state and its antiquated and really vicious system of enforced literary education in the critical years of youth here referred to? To correct this, might we not suggest that so far as the state is responsible and as Canada lately has placed the keystone upon her legislative arch, viz., the new Federal Department of Public Health, that this new organization work through its provincial branches in conjunction with the educational authorities of the various provinces and have this all-important question solved? In this connection an apposite thought here presents itself. In this very city of Toronto you employ, I believe, some one hundred nurses, devoted largely to the imparting of just such information to the expectant and actual mothers of this city. How much better would it be if this very essential knowledge could have been imparted to these mothers during their school days, in the most receptive period of their mind and when they are entirely untrammelled by sickness and the cares of the household.

As before hinted, such a course would go far to solve the problem of the domestic. Regardless of what other opportunities might present themselves, there are those, even sometimes from homes of opulence, that, given such a course, would choose to become professional housekeepers. They would take this up as a special study, ready to adopt it as their vocation and would be granted a diploma in attestation of their attainments. The menial duties of scrubbing and washing, and so forth, will necessarily vanish with the progress of invention, and none other than the housekeeper (strictly an honourable profession) would be needed.

What then would be the effect that could reasonably be looked for as a consequence of the change I have so imperfectly set forth, upon this

country of ours? Would it not solve many problems that are now perplexing us? Would it not reduce infant mortality? Would it not give us a rugged and virile race both in mind and physique? Would it not raise the moral standard of Canada most high? Would it not, because of knowledge gained, aid materially in making less complex the question of social disease? It would, I am persuaded, not only safeguard our girls, but would have a tremendous reflex influence upon the moral standard of the young man. He would be only too glad to enter into high partnership with a young woman so endowed. But he would, of necessity, as before intimated, have to be morally eligible, for *she knows* and she would be *independent*, and thus would possess the two most taking and alluring qualities that appeal to mankind.

The educational career as so outlined would be divided into three epochs or stages. First, the primary or fundamental—from six to thirteen years (inclusive); second, the intermediary or physical from fourteen to fifteen (inclusive) and, thirdly, the final or complementary period from sixteen onwards as far as necessary for those who wish to pursue a life calling for extended mental attainments. I refrain from elaborating the latter period, but if necessary, mental culture could be resumed, but not in such a way as even partially to undo the good work already accomplished. Greatly as it is to be desired that our women be intelligent, be learned, be mentally accomplished, of what use are any or all of these if to them be sacrificed the health, without which all else is vain? If such sacrifice obtains, it will only serve to render a life of semi-invalidism more pregnant of distress, in the thought of having in youth flung away contemptuously nature's best gift, and accepted instead, the poorest substitute of man's artificial conventions, and the painfully acquired problems of his mind.

The Medical and Allied Professions as a State Service

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IN an address which, as President of the Nova Scotia Institute of Science, I delivered in November 1916, but which was composed a year previously, there occurs the following passage:

"Although preventive medicine is state-controlled, curative medicine is still the same, unorganized, happy-go-lucky competition it ever was. Some thinkers assert that the time has now come for the applied science of curative medicine to be taken over by the State and organized into a system. Both departments—preventive medicine and curative medicine—would naturally be under the Department of the Minister of Science. Of course there would be but one portal of entrance with one uniform standard of examination into the departments of curative state medicine and of preventive state medicine. This one standard of entrance would remove many existing anomalies. The doctor would then be to the whole public what the club doctor is now to a section of it. He would attend to the cure of cases exactly like the M.O.H. attends to the prevention of cases. He would be a state official salaried and pensioned as such. It is an anomaly that if your child has scarlet fever, that while one aspect of the case can properly be taken in hand by an official only of the one aspect of medical science, the other aspect of the case has to be left to private medical enterprise. I should be able to summon a state-paid physician for a case of broken leg, pneumonia or insanity just as I now do the M.O.H. in a case of measles or diphtheria. This would of course lead to the whole problem of medical treatment being solved by being state-controlled. The great hospitals with their vast, beneficent, out-patient departments would become state institutions just as prisons, penitentiaries and asylums are already. There is no valid, other than a historical, reason why the scientific cure of disease should not be a state science as much as the scientific prevention of disease. The Indian Medical Service affords us an example of a state-managed medical service; it shows us how our organization might be so vastly extended as to become imperial. Promotions, disability pensions, retiring pensions, etc., would be arranged for as in the Civil Service. The State would, therefore, also logically take up the problem

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of research in medicine, and, directing it, coordinate the isolated efforts made in it in the manner most beneficial to the public weal. In the United States, private enterprise has endowed medical research in a truly magnificent manner. Private endowments could still be given for medical research within the British Empire, but it would be well if the directing of medical research were made a responsibility of the state. Much of it *is* even now; as for instance the splendid work on Plague done in India, and the work on Cancer in London. The medical researcher is a medical man no less than the general practitioner; he is only more specialized; he should equally be a servant of the state".

I am not aware whether or not Dr. Hattie knew of these views of mine when he suggested some time ago that I should open a discussion on this very subject, the suitability and desirability of the entire medical profession being made into a state service. Dr. Hattie was good enough to put into my hands an article by Colonel J. T. K. Maurice, C.M.G., entitled, "A Vision of State Medical Service" which was published in "The Hospital" for November 9th and 16th, 1918.

I cannot do better at the outset than quote Colonel Maurice's opening paragraphs, "Let us say in sickness the best advice and treatment is to be placed within the reach of every man, woman and child of the community, . . . thoroughly efficient measures to ensure the good health of the community are to be devised and properly carried out . . . Surgical and medical knowledge have stridden forward so rapidly in the last few decades that the means of diagnosis and treatment to the hands of the medical profession are far more elaborate, far more efficacious and far more costly than they were heretofore. The guess-work of the old clinical diagnosis can be supplemented by X-rays, chemical tests, sera diagnoses and so forth, and an accuracy, a certainty, attained that was formerly impossible. . . . These elaborate processes are expensive, many require special buildings, costly apparatus and men of long experience and special skill to apply them; and so under present circumstances they cannot always be brought to the service of the sick. . . . Sera and vaccines, new powerful drugs, anæsthetics, and antiseptic surgery have brought about a wonderful change. But treatment by these means is an expensive matter, and entails the employment of highly skilled nurses. . . so the wages of nurses have risen and rightly. . . . The total result of all these changes is that the expense of making an accurate and fully confirmed diagnosis, and of giving thoroughly sound treatment and nursing is so high that it is unattainable to most of the population except by charity. It could, however, be obtained by co-operation and mutual assurance, either by voluntary association or by submission to the necessary taxation. Either is better than the pauperization that comes of charity.

The ideal is a healthy race, each man paying for himself or paying his share of the cost of maintaining the common health.

Sanitary science in all its wide ramifications has not yet come into its own. . . . In some large towns a good deal is done to preserve health by preventing disease. But the important step of thoroughly educating the mass of the population has not yet been taken. All must learn that a healthy race implies parents without inheritable defects, strong and healthy in body and mind by gift of birth; implies restraint of the passions, avoidance of venereal disease, proper selection of foods, exercise in fresh air, avoidance of overcrowding, good ventilation of houses, healthy occupation, healthy amusements, and happy occupation of leisure instead of unwholesome pleasure. One of the first needs of health is to learn wisely to use leisure. All this must be taught. A state medical service should be an educating service. If a state medical service were formed, its functions should be executive and advisory. It should carry out measures to prevent disease, but the measures would emanate from legislative bodies. It should advise Parliament, county councils, corporations, and other public bodies. It should suggest legislation. It should treat the sick. It should educate the community in the ways of healthy living, and it should administer itself".

Before we descend to the details of the working scheme of the state medical service, let us consider the exact point we have reached in what might be called the evolution of the medical profession from the individualism of the physician of the middle ages to the somewhat socialistic position which he occupies to-day.

If we go far enough back, we find the doctor to be physician, surgeon, anatomist, botanist, zoologist and pharmacist all in one. In the 18th century one single professor often taught botany, anatomy, surgery, and what physiology there was. But now he has evolved or been differentiated into at least six persons—anatomist, botanist, surgeon, pharmacist, pharmacologist and physiologist. Just as in the village, the same store is post-office, grocer's, tobacconist's and various other things all in one, in the great city it is represented by half a dozen distinct establishments.

There is another feature of modern civilization, especially in Christian countries, namely the rapidly growing solicitude for the health and welfare of *sections* of the community as distinguished from the individuals in it. Previously, the individual physician treated or cared for the individual patient, and there his activities ended; to-day the public conscience is occupied with problems about the welfare of *groups* or *sections* of the public; with soldiers and sailors as such, boys under fourteen as such; with those infected with venereal disease, or with phthisis, or those who are in prison or are destitute. Specific groups in modern society are being studied, examined, educated, treated and cared for generally in

such a way as to show that the question, "Am I my brother's keeper"? has been very fully answered in the affirmative.

Thus we have societies for ameliorating the vital conditions of Thames bargemen, policemen, postal officials, illiterate immigrants, ex-convicts, seamstresses, indigent gentlewomen and many other groups in the community *as such*.

This is the day of a sanitarily-minded humanitarianism; the cruelty of the 18th century—of the Hogarth pictures, for instance—has gone, we hope, for ever. Society with a big S used on Sundays to make up parties to be entertained by the howls and antics of maniacs chained behind the bars of cells in Bedlam as the Hospital of St. Mary of Bethlehem, near London, was called.

The 18th century was cold, artificial, antipathetic, and cruel; but Hales and Howard and Elizabeth Fry and Florence Nightingale became pioneers in that movement towards modern sympathy not so much with the distress of individuals as with the suffering of social groups.

At the present time, it is the health of *sections* of the community that is the concern of governments, e.g. the health of miners, and workers in potteries, and wool-sorters, etc., *as such*. We have become communalistic, institutionalistic, socialistic in the very best sense of that word.

The instituting of a state medical service is entirely in harmony with the general trend of this ever-widening humanitarianism, for it means that the health of the nation is to be looked after in a manner similar to that according to which any other national concern is managed, war, the law, trade, agriculture, or fisheries. We have Offices and Ministers for these affairs of national importance; it is now suggested that we have them for the national health, a concern undoubtedly more important than any other.

The great war has made it very clear to us that far larger numbers of the population were physically infirm than we had any idea of. Even if all the military rejections were not sustained on revision, the number of men under the normal in health is alarmingly large. Now all this ill-health means inefficiency, not only from a military point of view but from every other.

But the war, happily, has shown us something else, namely, that the applied science of National State Medicine or Hygiene could, by the efforts of sensible organization, prevent the outbreak of those very diseases which in all previous campaigns proved more disastrous than wounds or bullets. In illustration of this may I quote the following figures: In the South African War the ratio per cent. of those dying of disease to those of wounds was as 65 is to 35. In the Great War, the figures are as 5.14 to 94.85. This revelation is a great triumph for preventive medicine; it shows what, given a fair chance, it could achieve

under the most disadvantageous circumstances. If all this prevention of disease and this conserving of human life could be carried out under the most distracting conditions of the most inhuman war in the history of this planet, what could not State Medicine achieve when working under the sane conditions of that normality called "Peace"? A national weakness must be met by national strength, a national disease by a national remedy.

What were then, briefly, the factors that made for hygienic success in the war? First, expert knowledge and the services of relatively few experts organized for the benefit of relatively many people. This is precisely the principle we advocate being applied on an imperial scale. The war was won by co-operation, and the more speedily as that co-operation was the more perfect. Why should this principle not be applied under peace conditions? If fighting and the law are considered such honourable state services, why may the equally noble profession of medicine not be so considered? Surely fighting and destroying are not the only outlets for patriotism. I submit that it is as patriotic to conserve the lives of the citizens of a state as it is to take away those of its enemies. It does not invariably require great skill though it may require great courage to take away a life; it sometimes requires all the resources of science to save one. As an old friend of mine used to say: "Any fool can burn my shirt; what I want is some one who can iron it".

While the highest expression of the patriotism of a day that is dead was to be proficient in the art of destroying life, may we not hope that the highest form of the patriotism of the day that has just dawned may be the attaining to the highest proficiency in the science of preserving life?

This state medical service is something more than merely organizing the medical profession as it exists at the present moment; it is nothing less than the creation of a state service for the explicit purpose of maintaining the highest health of the highest number of the citizens of our empire, and therefore systematically preventing the outbreak of diseases amongst them. This new service would conserve the health of all our social groups, the navy, army, the merchant marine, civil servants, inmates of prisons, penitentiaries and asylums for the insane, of boys in reformatories, of defective children, of blind and deaf and dumb, and immigrants and all foundlings. This state service would so supervise the health of school children that all our present amateur efforts towards child-welfare would become superfluous. It would take charge of all hospitals, general, surgical, maternity, for venereal diseases, for cancer and incurable diseases, and of course of all sanatoria, for all such institutions would then belong to the state. The S.M.S. would supervise the noble nursing profession in all its activities. It would investigate all

problems coming under public sanitation—adulteration of food, the storing, cleansing and distribution of water, inspection of ventilation, quarantine, prophylactic inoculation and everything else included under "State Medicine" in the older, more restricted acceptance of that term. It would supervise all specialisms and techniques including dental surgery, orthodiascopy and the therapeutic use of all forms of energy. Naturally the compilation of vital statistics would fall under the province of the S.M.S. Finally it would not only organize, direct and reward research, but also organize, direct and reward all forms of teaching required in the medical profession, for by the time of which I am speaking, the universities, like the hospitals and laboratories, would have become state institutions. There would not only be no private hospitals, there would be no private schools of medicine whatsoever. Research into such large problems as the cause and treatment of rheumatoid arthritis and other widespread diseases which claim millions of victims a year and produce a great deal of inefficiency and invalidism—problems far too large for any one man or one institution—could at last be investigated by the State.

This is neo-socialism, socialism in excelsis, which has absolutely nothing to do with the socialism of the red tie and the levelling down to an h-less vulgarity. Therefore, for this neo-socialism a name is needed: I would suggest *co-operationism*, for we are thinking not of any ideal and indeed wholly Utopian conditions where all men are considered equal (which they never were nor can be) but of a social state in which the special attainments of the co-operating few are specifically organized for the benefit of the many. Individualism, often heroic beyond all description, was sufficient for the earlier, ruder, simpler and smaller communities; but co-operation, the organized working for the common good, is the goal we aim at in this newer and truer socialism. Individualism meant rivalry and jealousy, a waste of energy with its consequent detriment to science; co-operationism a unity of plan and a definiteness of purpose with its corresponding increase in efficiency. The gain from all this to the ordinary, ungrouped member of the community is at once apparent; not only would he command the very highest skill in diagnosis and treatment, but there would be no longer any need for him to subscribe to sickness clubs and similar societies since he would belong to a nation which was one, vast, mutual benefit society. He would, like the Chinaman, pay to be kept well; but if by any mischance he did become ill, he would have, as it were, round the corner all the resources of a world wide empire to cure him.

One must gratefully acknowledge that a Department of Health under a Deputy-Minister of Health has already been created in Canada by an Act which passed the House of Commons on April 11th, 1919. Some of

the duties to be undertaken by this new Department are—the maintenance of a national laboratory for public health and research work; inspection and medical care of immigrants and seamen and the administration of marine hospitals; the supervision of all matters relating to the health of those employed on railways, boats, ships and all methods of transportation, as well as the health of civil servants and of all government employees.

THE ACTUAL ORGANIZATION.

If one sketches the organization for London and Great Britain, then it could be adopted by any other part of the Empire and modified, if necessary, to suit particular conditions. Naturally, the organization of the R.A.M.C. is the one to be followed as a general model. The headquarters staff would have to reside in London, and direct the service not only in London itself but throughout the whole country. The size of London makes it unique in regard to any organization, and it has to be treated as equivalent to a whole district.

After London in order of importance would come the large provincial cities, Edinburgh, Glasgow, Birmingham, Liverpool, etc., each of which would have to be administered by a staff for itself. In each, the hospitals would be so organized as to provide for in-patients, out-patients, laboratory diagnostic work and for all the necessary technical, diagnostic and therapeutic activities. The practitioners of each city would all be S.M.S. men, and would be organized into the resident hospital service, the out-patient service, and the general city service. No one of these would be considered more honourable than any other. Associated with the great city hospital would be a group of small towns, each with its hospital, and associated with each of these again would be a group of rural or cottage hospitals.

FINANCE, SALARIES, PENSIONS.

There is no question as to the S.M.S. being a costly service. It might, however, prove in actual experience not so costly as at present on paper it seems to be. For, in the *first place*, in a state which adopted co-operationism, the enormous expenses previously needed for the upkeep of the huge Navy and the Army would be saved. In the *next place*, a great many institutions having private endowments from public or private charities would have their funds taken over by the state as trustee, and would therefore cost the state by so much less to administer.

Thirdly, the vast sums now given by public and private charities would become equivalent to part of the taxes for the public health paid by everyone towards the upkeep of the S.M.S.

Fourthly, the endowments of certain old and large British hospitals and seats of learning would pass over into the custody of the state.

From the patients' point of view the S.M.S. would be a glorified state insurance against illness, not, of course, as a charity or on the meagre scale of a private mutual benefit society, but on that of the greatest and most enlightened empire in history. Colonel Maurice says the funds could be raised (1) out of general taxation on the budget, (2) by rates and (3) by a special public health assessment applicable to all adults according to their means.

ADVANTAGES.

The benefits of a state medical service are evidently twofold; those accruing to the members of the medical profession, and those to the public. In the first place, as all properly qualified medical men would become registered in the national service, the quacks and irregular practitioners would soon be exposed and got rid of. Osteopaths would become licensed masseurs and nothing else. Homeopaths and "faith-healers" would cease to be because they would not possess the state license to practice.

In the next place, there would be no struggle for existence, because each man would have a salary sufficient for his needs from the outset, with the prospect of a disability or of an old age pension as the case might be.

The soul-destroying competitions, rivalries, and jealousies of the old *regime* would to a large extent disappear. There would, however, be plenty of incentives to the ambitious men to rise in the profession, there would be plenty of research to be undertaken, plenty of rough places to be made plain. No one can say that there are not plenty of incentives to rise in the state professions of the Navy, the Army or the Law; and it need not be any less so in the S.M.S.

The advantages to those in need of treatment are, in the stock phrase, "too numerous to mention". The public health would be preserved as never before; treatment would be prompt and of the very highest quality; specialists of all sorts would be easily accessible, and all manner of special treatments readily available. There would, on the one hand, be no possibility of overlapping, nor on the other could there be whole districts of the country without a medical man as at present.

FINANCE.

In Colonel Maurice's scheme the salaries to officers in the S.M.S. run from £300 a year (\$1,500) to £5,000 (\$25,000). Colonel Maurice says that under a state medical service the medical man would be relieved of the expenses of travelling, of instruments, consulting rooms, drugs and dressings. "For the highest administrative ranks", he says, "the pay would be at least equal to the highest ranks of the civil service".

It must be recognized by the state, and it will soon thereafter be recognized by the public, that it is just as honourable to save a life as it is to blow up an enemy of one's country or sentence a criminal to be hanged.

Under co-operationism, the health of the commonwealth is considered a more important affair than any other aspect of the national existence. As has been mentioned, entrance into the S.M.S. would be by the regular Final examinations of the state universities, it being the understood thing that every medical graduate was destined for that service. Successful candidates would be graded according to their relative standing, and to some extent allowed the choice of positions as in the civil service. The pay of all members would not, of course, be equal. In co-operationism there are grades of service, and emoluments vary with height therein and with responsibility. Some men prefer to remain in the lower grades with few or no responsibilities; others capable of assuming responsibilities are allowed to do so and are rewarded accordingly. Retirement on pension at certain ages differing with the position attained in the service, would, of course, be duly provided for. The medical profession is the one doing the maximum amount of work in the interests of others; and this proposed organizing of it would be the official recognition by the state that these things are so.

In conclusion let us look at certain *objections and criticisms*. As there is nothing new so there is nothing perfect under the sun. The following are among the objections that have been raised to the S.M.S.

1. It would do away with the patient's right of choice of a physician, surgeon, obstetrician, etc. It is asked, are rich and poor, leaders in society and persons not in society at all, the unco' guid and the declassé, all to be treated by the same medical man or in the same institutions? I cannot do better than quote Colonel Maurice's answer to this:

"It has always been the case that certain surgeons, physicians and obstetricians have earned great reputations, are in great demand and are able to command large fees; and always there have been wealthy persons prepared to pay the fees such highly considered men demand for their services. Some have special faith in one, some in another; and some only ask that some one of great renown shall operate upon them or those dear to them. There is no reason such a system should not continue with a state medical service. The state will provide efficient attention (attendance?) for every citizen, and will appoint to each his medical attendants, and will see to it that each can get the special skill and nursing appropriate to his or her case.

Every man will be safe to trust to the organized care offered him; but if he fancy some special surgeon or physician of whom he has heard, there will be no reason why he should not choose, if he cares, to pay a

special rate for that man's services. A rich man, then, has appendicitis. He has at hand in his sub-district a surgeon thoroughly competent to operate on him, and he can, if he choose, take a special ward in his district hospital for the rental charged for it, or he can, if he be frugal minded, use the free wards and go in and be operated on by the surgeon free of all operation fee. But he has heard that some man has a specially great reputation or is fashionable because he has operated on Royalty or he fancies him for some reason or no reason. There is nothing to prevent his demanding the services of that surgeon and paying his fee. The fee will vary with the man just as it does now; twenty-five guineas, fifty guineas, a hundred guineas or more. . . . But the surgeon is the paid servant of the state, paid out of taxation or special medical contribution; he cannot, therefore, be allowed to turn aside from his state service for special cases and receive double pay. He must share his fee with the state.

As it is important to stimulate men to make themselves fit for the front ranks of the skilful and to stay there, it would not be politic to take all of such special fees. The great surgeon is drawing £5,000 a year from the state. His special fee is fixed at from 100 guineas to 250 guineas. He goes to the rich man, takes 100 guineas fee, and gives 50 guineas to the state. So if he does 100 such special operations in a year, he will make £10,000 a year and more for himself, and the state will get back in half fees all his pay and get work from him into the bargain. Nor can such a scheme be considered unfair to doctor or patient. To the former, ever since he entered the service, the state has assured a competency and given education and opportunity. It is fair the state should share his special gains that come of that opportunity. To the patient, the state, through its carefully trained and supervised medical service, guarantees competent medical attendance at no more cost than the common taxation necessary to secure it. If through whimsicality or for more excusable reason, an individual wishes to upset the state arrangement by a special call, it is not unfair he should pay a special rate for the privilege".

In all probability something like this would happen; the hospitals belonging to a rich and fashionable district would soon be frequented by a rich and fashionable clientele; the others by others. There would be a process of natural selection on the part of patients in respect of individual physicians, institutions, and districts; and in a short time, social segregation and sedimentation would have worked out society's own salvation.

So far the objections contemplated apply less to a democratic country like Canada than to a country like England which still possesses a landed aristocracy and where social distinctions are still numerous and

fairly well defined. Naturally we could hardly expect His Grace the Duke or His Grace the Archbishop to be treated at the same clinique as his coachman or his butler.

Certain hospitals would in time become so popular with a certain section of the wealthy or exclusive set that they would virtually correspond to the expensive private hospitals of the old regime.

More real as a factor working for failure is the ingenuity of human nature to wreck the fairest scheme ever put forth by the human brain. The odious system of political patronage, whereby incompetent persons can be appointed to positions intended to be filled by experts can blast schemes that are brightest.

The S.M.S. by its very nature and aims ought to be the one most remote from the baneful influences to which we are now alluding. The service would be administered not by lay figure-heads but by medical men and experts themselves. The appointees would receive their commissions not by favour, caprice or nepotism, but by merit brought out at examination.

There is no Eden without its serpent; but if any organization of human contriving might be reasonably expected to be free from the reptilian blight of political interference and mismanagement, it surely would be that of the State Medical Service.

Some Observations in a Recent Epidemic.*

DR. H. O. HOWITT

Guelph, Ontario

WHEN we look back, now, at the bulletins that were posted during the war, our attention is arrested immediately by one sent from Barcelona in June 1918—

"A German submarine put into this port, and all the crew are suffering from a strange disease."

Later—"Throughout the city and in this neighbourhood a 'strange disease is raging'."

Despatches from the various parts of Europe that subsequently arrived, made it easy for us to trace the spread of the disease in a fan shaped manner over the surface of that continent, except in those countries that were at war with us.

Then it was announced that the 'strange disease' was Influenza, and we felt relieved that it was nothing more serious. We thought of the epidemic of 1890—and remembered the high mortality among the aged—but little thought what was ahead of us. The government, for reasons of its own, did not make a statement as to the seriousness of the disease among the troops, but we were struck with the large number of deaths from pneumonia that were reported. Civilians wrote from England about the terrible severity of the epidemic, and a few weeks later a despatch from Quebec mentioned that there were 8 cases on board a ship in that port. Then at short intervals the despatches came from Montreal, and other centres, on the line of travel westward—until we found ourselves in contact with influenza. But never did the bulletins announce its presence quicker than modern conveyances could carry passengers. The same story probably applies to all Atlantic ocean ports that received travellers from Europe. We were informed that it would disappear, when the cold weather came, but it thrived in spite of the zero weather of our north, and we have since learned that it thrived in Siberia. Some said that the sun-light would destroy it, but the lovely sun of the Riviera was powerless—just as we have recently been informed that 6,000,000 lives were lost in spite of the hot sun of India. We have learned that a population acquired immunity by surviving the epidemic as best it could, and paying a large price, in loss of life.

*Read at the Annual Meeting of the Canadian Public Health Association, May 27th, 1919, Toronto.

On November 10th, 1918, with Dr. Reynolds of Erin, I saw a patient, whose symptoms were so acute that we had to consider—perforation of the stomach. We diagnosed the case as influenza (Spanish), and the subsequent developments proved our diagnosis to be correct. This was my first case.

A day later through the press, I warned the citizens that there would probably be an epidemic in Guelph, in about 2 weeks, and gave instructions as to immediately going to bed, etc., with the very first symptom. The prediction was right almost to the day. Then the press published daily the toll of death in neighbouring towns, and our citizens were very careful, as to the way they cared for themselves—but for 2 weeks no one died, then an idea got abroad that we had not *real Influenza*. They were soon disillusioned however, the disease increased in virulency, and many valuable lives were lost before the epidemic burned itself out for lack of susceptible material to attack.

Of those who followed the rules laid down, nearly all survived; there may have been exceptions, but I cannot recall one.

The foreign population fared the worst. But they did not follow the rules, they would not stop work until they were too ill to work any longer. Many of these Italians and Austrians were splendid specimens of manhood, but they lost a little less than 10% of their total population.

Next we lost fathers of young families, fathers who felt they had to work on, and young mothers who would not take care of themselves because they thought that they had to work or nurse "for their children's sake". Then there was another class, also young people, that class which is always with us—that class which refuses to learn anything from the experiences of others.

I know of a town in Ontario, with only 2 doctors and a hospital well out of the town. Doctor no. (1) kept his patients at home in the bed he found them in, and preached the "rules" and lost very few patients. Doctor no. (2) had his patients driven in an ordinary conveyance to the hospital, and used many drugs; but was unfortunate in his results.

Those who came through the epidemic of 1890 certainly fared better than the generation that has since grown up, without the immunity that it granted.

I noted several cases of what might be called natural immunity. One a volunteer nurse of about 20 years who nursed the poor. She bordered on the verge of exhaustion for two or three weeks, she disregarded all rules of self protection. She did everything possible to take the disease—even breathed the breath of a patient—but she escaped!

I have had direct or indirect experience with most of the vaccines and serums recommended as "cures", or aids to cures, but confess that I saw little benefit from any of them. The vaccine supplied by the

Provincial Board of Health may have been of benefit, but reached Guelph when the epidemic was dying out, and even then it was not too late to note several vaccinated cases take the disease.

Treatment.—To bed—a purge—keep warm—and stay in bed for three to five days after the last symptoms had gone—with fever diet—was in my experience the most satisfactory treatment

If bones ached, a little Tr Gelsemium. If much fever, a fever mixture. Perhaps a headache required something, but very seldom. I was struck with certain resemblances to *typhoid fever* in spite of the different onsets and lengths of each.

Especially the *haemorrhagic* tendency from almost every organ, more particularly nose, bowel, and even into the skin. Then there were (2) headaches, (3) coated tongue, (4) bad taste in mouth, (5) parched lips, (6) early constipation, (7) delirium, (8) furunculosis (following the attack), (9) the tendency for hair to fall out, (10) then as some were left worse, and some improved in health by an attack of typhoid, similarly we find the same holds true with an attack of influenza.

Some half-dozen cases of stationary tuberculosis that I saw with influenza, have come through without ill effects up to the present, but Dr. McCrae of Philadelphia remarks, "that it will be interesting to watch the next twelve months, it is possible that as an after effect of the epidemic we may see more cases of tuberculosis than for years past".

In a town near Guelph I have recently performed two nephrectomies—both kidneys were destroyed as a result of influenza.

A patient of mine, a Toronto teacher, informs me that ten out of one hundred school teachers that she lived with, have died in the last few months of tuberculosis, and that more are now ill with it.

Some Problems for the New M.O.H.*

DR. D. V. CURREY, M.O.H.

St. Catharines, Ont.

HAVING recently returned to St. Catharines after an absence of a few years I was asked by the city council to take over the position of M.O.H. and as my problems have likely been similar to those met with by every new M.O.H. in the smaller cities this paper was asked for as our conditions are essentially different from those met with in larger cities.

In former days our local board of health existed in name only, meeting a few times each year at odd intervals. The flu epidemic as in many other places brought severe criticism and the Board resigned. The present Board is a live organization with an enterprising mayor as chairman, meeting regularly every Thursday in each month, and unless the secretary has been notified all are present sharp on time. An active interest is taken in health affairs, and at each meeting a written report on work done during the previous month is given by the M.O.H.

On being appointed I found a very efficient secretary of the Board, and a Sanitary Inspector who was very willing and conscientious, but except for the returns sent to the Provincial Board of Health there was no record of work done by the Department.

After my appointment a complaint department was opened, citizens are encouraged to notify us about unsanitary conditions, and all complaints receive immediate attention. For this purpose we use a small card on which is written the complainant's name, address, and telephone number, the nature of the complaint, date, time received, and this card is initialled by the member of the Board of Health who receives it. The Sanitary Inspector or M.O.H. makes a brief report on the back of the card and it is filed. This gives us a daily record of the work done.

For infectious diseases a similar system is used and is put on an active file until the quarantine is raised, then it is filed away. These slips have the name of the attending physician and all tradesmen who visit the premises. For the latter we tack up printed instructions telling them where to leave their goods and to take nothing from the house, such as milk tickets, etc.

The ambulance in use by the city was bought some 15 years ago by a few patriotic men and has been kept in a livery stable, the horses being supplied from here. This service is very unsatisfactory as the question of paying for the horses must be settled before the patient is moved.

*Read at the Annual Meeting of the Ontario Health Officers Association, Toronto, May 27th, 1919.

Last summer an airman crashed near the city, our ambulance was phoned for and the R.A.F. depot 15 miles away was notified. Before the city ambulance reached the scene of the accident a motor ambulance from the depot had arrived and removed the case. At the first meeting I attended of the Local Board of Health I asked that a public subscription list should be opened for funds to buy an up to date motor ambulance which would be ready for a call day or night and for which no fee would be charged. I have interested the I.O.D.E. in this matter and we have now within \$1,000 of the amount needed. I also spoke at a meeting of the Executive of the Trades and Labour Union and they have promised to take the matter up and assist us.

The milk supply for our city has not been very good. Less than 50% is pasteurized and the butter fat is usually a very little above the 3.21% demanded by our by-law. I wrote to all the dairies telling them that a monthly test would be made including that for sediment and that reports would be published in the daily papers. The result is that our milk is cleaner and the last test showed up very much better than any previous one. We hope to pass the model milk by-law as suggested by the Provincial Board of Health and we are considering opening a milk centre where pasteurized milk may be supplied for children and expectant mothers at practically cost. With the Milk Inspector I have visited many of the farms supplying milk to the city and found most of them in very good shape. Two herds, however, were very dirty and no attempt was made by these two farmers to supply clean milk and the dairy was advised not to take milk from them until the city regulations were complied with.

The foreign quarter on the outskirts of the city has no sewers and because of this it is almost impossible to keep sanitary and free from surface water. The houses are, however, well separated. I found great difficulty in conversing with these people especially if I found fault with things. Many of them keep cows in filthy stables, and although we cannot prove it we are sure milk is sold. With the aid of the Polish priest we are getting out a Health Bulletin every two months published in Polish, Armenian, and Italian and by so doing we hope to reach these people and try to show them the advantages of sanitary surroundings. The city council have promised to put in sewers this summer and I am sure this will to a great extent help in cleaning up this neighbourhood.

Our Isolation Hospital is an old building on the very edge of the city and is regarded by nearly every one as a pest house. No provision was made when building to separate different infectious diseases nor can this building be properly subdivided. The Board of the General and Marine Hospital have promised to build an isolation building when the hospital is enlarged.

The garbage disposal is far from satisfactory. Open waggons or trucks do the collecting from the houses and very few citizens have been using covered metal receptacles as the by-law calls for. The garbage dump is inside the city limits. In winter it is covered with ashes and in summer an attempt is made to burn it, with the result that on a still evening a foul-smelling cloud of smoke hangs over the city, and often the garbage burns so well that the fire department has to put it out. This year our city Council on account of other expenditures cannot consider an incinerator but I hope next year this matter will be taken up by them. The City Engineer's Department and the Local Board of Health are co-operating and endeavouring to make the citizens live up to the garbage by-law.

There have been very many complaints about outside toilets even on streets which have been paved and sewered and many house owners claim they cannot pay for an inside convenience. We now inform these people that the city will do the work and charge it up in taxes for the next five years with interest at 5% but the work *must* be done. This has resulted in many outside toilets being done away with.

The water supply is plentiful and good although the water gets fairly warm in summer. The Superintendent is most anxious to co-operate with the Board of Health and the water is examined bi-weekly by an expert.

One of our greatest needs at present is a Child Welfare Nurse but it seems very hard to make the people see the need of one. I spoke at several meetings of Women's clubs and tried to interest them in this matter, and I am to meet the Finance Committee of the City Council this week when I will ask that a nurse be appointed at once. A representative of the I.O.D.E. Local Council of Women, Trades and Labour Union, and the Board of Trade will be included in the delegation.

The Sanitary Inspector is very anxious to improve himself in his work but so far I have not been able to find out where he could take a course. Perhaps the Provincial Board of Health could arrange for a practical course to be started and I am sure many inspectors would avail themselves of the opportunity afforded.

The medical men I find do not take advantage of the Provincial Board of Health Laboratory and I have tried to let them know by letter from time to time what work is done there. Serums, vaccines, and anti-toxins, etc., supplied by the laboratory have been kept at the city hall in a corner of the furnace room but I advised the Board of Health to purchase a small refrigerator and keep these things at an even cool temperature. Both our hospitals have been supplied with anti-toxins and serums which are kept in the refrigerator and are available for the physicians on holidays and after office hours.

There has been a great laxity on the part of the physicians to report venereal diseases. I have written them about this and have enclosed a few forms VI, V.D. which I received from the Chief Medical Officer. With these forms I also enclosed a copy of "Physician's Pocket Reference to the International list of Causes of Death", and asked that the nomenclature be used to facilitate our returns for the year.

These have been our problems and I have tried to show how we have met them and how I have endeavoured to get outside organizations to take an interest in the health of the citizens at large. Too often I have noticed the M.O.H. is almost alone in trying to decrease the death rate in the municipality. It seems to me that the women's organizations which have done such good work during the war should be appealed to, for most of them are only too willing to help out in matters of public interest. The Trades and Labour Unions are strong bodies, and their co-operation should help every new M.O.H. in his work, while the practising physicians should also do their share in assisting him, but it seems to me unless we have an active Board of Health in every municipality holding regular meetings, and an energetic sanitary inspector the M.O.H. is not going to accomplish very much.

In conclusion may I take this opportunity of thanking the Chief Medical Officer of Ontario for the help he has been to me, and for the prompt manner in which literature from his office, and serums, etc., from the laboratory have been sent over to me whenever asked for, and I can assure you gentlemen that if any of you are in difficulty a good address to keep in mind is "Parliament Buildings, Toronto". I am also indebted to the District Medical Officer for his kindness at all times.

A Plan for a More Effective Federal and State Health Administration.

FREDERICK L. HOFFMANN, LL.D.

Third Vice-President and Statistician the Prudential Insurance Company of America

(Continued from our last issue).

A STATE MEDICAL SERVICE

The third fundamental principle of modern health administration is a thoroughly well-worked-out *limited state medical service*, including under that term all of the medical services now rendered in connection with public institutions, poor-law establishments, schools, state and municipal dispensaries, clinics of all kinds, etc. The existing state medical service is already quite considerable and requires only to be amplified and re-organized on a more substantial and well-considered plan. The new organization, however, should rest upon a totally different principle from that of the old one, and that is the clear recognition of the duty of the state to afford the best qualified medical and surgical service to *all* those who are in need thereof, even though they are unable to pay therefor the usual and not unreasonable charges common in every-day private practice. To overcome the difficulty of the stigma of apparent poor-relief the state medical service should be scrupulously kept outside of any general poor-relief administration, and, being supported by public taxation, conform in its essentials as a public utility to the same governing principles which apply to the use of public libraries, public schools, etc. Certain practical difficulties, no doubt, would arise at the outset of such a proposed state medical service, but it is the only alternative to the existing chaotic condition, which, in many respects, is in urgent need of radical reforms.*

The service, however, should be limited to serious cases, defined in the light of a rational understanding of public requirements, and no

*The important question of the proper place of dispensaries, infirmaries and consulting clinics in modern health administration can not be adequately discussed on the present occasion. An important work which should be consulted by all who are interested in this subject has recently been published by Michael M. Davis, Ph.D., Director of the Boston Dispensary, and Andrew R. Warren, M.D., Superintendent, Lakeside Hospital, entitled "Dispensaries, Their Management and Development", New York, 1918. This work includes a brief historical account and a discussion of fundamental principles and technique, as well as descriptive accounts of special types of dispensaries and related public problems, such as the relation of dispensaries to the medical profession and the organization of a dispensary service for a community. The work includes also a useful bibliography and a copy of the Massachusetts dispensary law.

effort should be made to serve the large number of patients suffering from minor ailments, to the disadvantage of those in serious danger and most urgently in need of the proper medical or surgical skill, supplemented, if required, by even prolonged nursing, attendance, medicines, appliances, etc. However difficult the solution of this question may be, it represents a decidedly preferable form of organization to the extremely costly, burdensome, and undemocratic method of compulsory health insurance typical of German autocracy and involving a disregard of the personal rights and liberties of a true democracy.

LIMITATIONS OF THE POLICE POWERS IN RELATION TO HEALTH

The foregoing three principles, (1) the physical and medical examination of at least children and young persons to their majority, (2) the accurate and complete registration of at least all serious illnesses considered as a community problem, and (3) the establishment of a limited state medical service, do not precede, but merely logically follow or amplify the existing form of public health organization. There will never come a time when the police powers, as indicated at the outset, will not take precedence in dealing with communicable or quarantinable diseases, public sanity necessities and public nuisances, over any other matter not immediately concerning the endangered health and welfare of the people. But there can be no permanent improvement in health administration until the foregoing three principles, however much modified in matters of detail or enlarged in directions not indicated at the present time, are vigorously applied and made a condition precedent to whatever form of public health reorganization may be ultimately decided upon for the Federal Government as well as for the several States.

The scope of future Federal supervision of State activities is wholly a matter of speculative conjecture. There has on the other hand been a marked growth of Federal power, and on the other a practically unanimous public consent to the broadening of Federal administrative functions, so that it seems a foregone conclusion that the tendencies in this direction are towards further enlargement, rather than towards restriction or curtailment. The adoption of the Fourteenth Amendment in 1868 unquestionably affected profoundly the development of certain State functions and particularly the administration of quarantine and public health. The police power, according to Hare, "embraces all the operations of state and government; all the constitutional provisions presupposes its existence and none of them preclude its legitimate exercise". As observed by Willoughby in his work on the Constitution, "The enactment and enforcement by the States of quarantine laws, whether with reference to persons or to property, have given rise to numerous cases in which their constitutionality, as tested by the Com-

merce Clause, has been considered. Quarantine laws are, of course, but a variety of police laws and their validity is determined as such". While no legislative power with reference to quarantine is specifically given to the Federal Government by the Constitution, Willoughby points out that nevertheless the Government "has very broad powers on the subject, as incidental to its control of foreign and interstate commerce, admiralty and maritime matters and foreign relations". He concludes a brief reference to the subject with the remark that "To only a moderate extent, however, has this Federal power been exercised". The implication of all the legal observations on the quarantine and public health powers of the Federal Government seems to be that these are among the implied powers of the Constitution, when in the nature of the case the exercise of full Federal power may be needed because of the failure of State authorities to act with the required degree of efficiency demanded by the highest considerations of public welfare. It may, however, be deemed appropriate on some future occasion, if only for the purpose of avoiding confusion and conflict, to adopt a constitutional amendment under which the police powers with regard to public health and quarantine would be transferred to the Federal Government to the full extent necessary for all Federal purposes.

OUTLINE OF PROPOSED STANDARD PLAN OF HEALTH ADMINISTRATION

It would unduly enlarge this discussion if all the details of such a required reorganization of our public health services were presented on this occasion, even in the broadest outlines compatible with the vital importance of the subject.* It has therefore seemed best to merely

*Among the more important contributions to the subject of health administration reorganization are the following: A Discussion on the Co-ordination of the Public Medical Services, by Dr. (now Sir) Arthur Newsholme, contributed to the Proceedings of the British Medical Association, 1907; The Economic Advisability of Inaugurating a National Organization of Health, by J. Pease Norton, read before the American Association for the Advancement of Science, 1906; Proposed Plan for an Institute of Public Health and Preventive Medicine, Confidential Publication, Columbia University, April 26th, 1910; Argument for the Establishment of a National Department of Public Health, by U.S. Senator Robert L. Owen, U.S. Senate, March 24th, 1910; Memorial in Behalf of the American Medical Association in Reference to Senate Bill 6049, Establishing a Department of Public Health and for Other Purposes, April 26th, 1910; The Present Organization and Work for the Protection of Health in the United States, by Walter Wyman, M.D., Surgeon General U.S. Public Health and Marine Hospital Service, read before the American Public Health Association, 1910; Letter from the Secretary of the Treasury, transmitting, in response to Senate Resolution of January 16th, 1913, information relative to the expense for the year 1912 of the Public Health and Medical Service, February 12th, 1913; Paper on the School for Health Officers of Harvard University and the Massachusetts Institute of Technology, by Milton J. Rosenau, Bulletin Massachusetts State Board of Health, September, 1913; Address on the

sketch the following plan of subdivisions of health functions as a tentative program suitable for discussion and rearrangement or amplification in matters of detail: The term "U.S. Health Administration" seems in every way preferable to the term "U.S. Public Health Service", at present in use. The functions already rendered, and to be rendered, are distinctly administrative, rather than in the nature of mere governmental services, possibly misconceived as matters of useful convenience, though of paramount necessity. The public has become familiar with the terms "Food Administrator", "Fuel Administrator", etc., and it would seem best, in any future health reorganization, to adopt such a term as is here suggested rather than to continue the obsolete and quite insufficiently descriptive one of "Surgeon General".

The proposed health administration, therefore, would seem to group itself naturally and more or less in the order of their importance or logical interdependence, into three main divisions, each of which should be in charge of an assistant federal health administrator, as follows:

PROPOSED DEPARTMENTAL ORGANIZATION

(Tentative)

Division A—General Public Health and Quarantine.

- Sec. 1 Health Organization and Administration.
- " 2 Health Laws and Ordinances.
- " 3 States Relations Service.
- " 4 International and Maritime Quarantine.
- " 5 Communicable and Transmissible Diseases.
- " 6 Urban Sanitation, Town Planning, and Housing.
- " 7 Rural Sanitation.
- " 8 Sanitary Engineering and Drainage.
- " 9 Tropical Medicine and Sanitation.
- " 10 Hygiene Laboratory.
- " 11 General Scientific Research.

Training and Status of Public Health Officers in the United Kingdom, by Geo. H. F. Nuttall, M.D., Transactions Fifteenth International Congress of Hygiene and Demography, 1912; The Full-Time Health Officer; An Address by Louis I. Dublin, Ph.D., State Conference of Health Officers of Kentucky, 1913; Co-operative Public Health Administration, by Prof. Earl B. Phelps, U.S. Public Health Service, September 25th, 1914; Co-operation and Co-ordination of Voluntary Public Health Organizations, by Frederick R. Green, M.D., American Public Health Association, 1914; Report on the Present Condition of Public health Organization in the United States, by Prof. S. M. Gunn, American Medical Association, 1915; A Survey of the Activities of Municipal Health Departments in the United States, by Frank Schneider, Russell Sage Foundation, 1916; Will the Private Practitioner Determine the Future of Public Health Work, Address by Haven Emerson, M.D., New York, 1916.

Division B—Medical Practice and Physical Welfare.

- Sec. 12 Medical Practice, Pharmacy, and Dentistry.
- " 13 Physical Anthropology.
- " 14 Child Hygiene.
- " 15 School Hygiene.
- " 16 Personal Hygiene.
- " 17 Industrial Hygiene.
- " 18 Mental Hygiene.
- " 19 Social Hygiene.
- " 20 Hospitals and Institutions.
- " 21 Race Pathology.

Division C—Statics and Information.

- Sec. 22 Mortality Statistics.
- " 23 Morbidity Statistics.
- " 24 Health Education, Health Propaganda, and Publications.
- " 25 Associated Activities and Health Promoting Agencies.
- " 26 Higher Education in Public Health Administration.

SCIENTIFIC INVESTIGATIONS AND GENERAL RESEARCH

In the foregoing outline no provision is made for special divisions or departments concerning diseases of exceptional importance, such, for illustration, as tuberculosis or malaria. Investigations or activities concerning these and other important diseases, such as pellagra, poliomyelitis, trachoma, etc., are now carried on by the Public Health Service through the Department of Scientific Research. It may well be a question, however, whether these diseases should be made primarily a matter of research or of exclusive concern as to their more involved scientific aspects, or whether they should be conceived as administrative problems requiring action on the basis of a well-considered Federal policy coordinated or correlated to State and local activities in the same direction. It would perhaps be better to make the functions of a research department more restricted and to broaden the field of administrative activity. In whatever direction such a broadening process might be deemed advisable, this would be readily feasible through the section Health Organization and Administration, or under one or more of the other subdivisions, such as Urban Sanitation, Rural Sanitation, etc.

The immense field of scientific research into questions and problems concerning health and longevity precludes more than a mere reference to future possibilities under the guidance of a thoroughly well-developed Federal Health Administration. The resources available for such work have, fortunately, very materially increased during recent years, on account of the establishment of several great foundations, primarily

concerned with investigations of a highly technical character and involving large expenditures and the employment of technical skill of a very high order. Such an investigation, for illustration, as the report on the "Physical Welfare of Mothers and Children in England and Wales", issued by the Carnegie United Kingdom Trust in 1917, illustrates the hopelessness of individual or private research under the usual restrictions of income and time. An earlier but very admirable set of papers on "Research in Medicine", by Prof. Richard M. Pearce, originally delivered at the University of California, but subsequently reprinted from the *Science Monthly*, may be made note of as a basic outline of the problem in its broader aspects, both scientific and practical. From the individual viewpoint of the subject of medical research and human welfare, based on a record of personal experiences and observations during a professional life of fifty-seven years, a brief treatise by Dr. W. W. Keen, Emeritus Professor of Surgery of Jefferson Medical College, Philadelphia, may be referred to as a most useful presentation of practically all the essential subjects which will in the future require more scientific consideration on the part of organized health organizations than they have had in the past. It may be argued, of course, that research work of this character should be left largely to the great foundations, to avoid duplication of effort and waste of time, energy and funds. But only to the extent that the coordination of health functions is perfected will the risk of such duplication be reduced to a minimum. There are many reasons for believing that at the present time parallel lines of identical research are frequently carried on by government and private interest, when a better understanding of plans and purposes would lead to earlier and better results. As admirable illustrations of research work by modern foundations, it is necessary only to mention the studies of the Rockefeller Institute for Medical Research, which have become indispensable to every student of medicine in all its branches, as well as in the administration of public health. Equally important are the scientific investigations of the Department of Research Medicine of the University of California Medical School, under the auspices of the George Williams Hooper Foundation. Finally, mention may be made of the contributions which have been forthcoming from the George Crocker Special Research Fund on the Scientific Study of Tumors and of the Collis P. Huntington Fund for Cancer Research of the General Memorial Hospital. The endowment of research along these lines has unquestionably rendered very substantial aid to the progress of medicine, but under a thoroughly reorganized Federal Health Administration such activities as now exist or as may come into existence in the future could unquestionably be more effectively coordinated to the plans of research as developed and worked out by the Federal Government.

(To be continued.)

"Early Treatment" and the Control of Venereal Disease.*

THE place of "early treatment" in the programme of venereal disease control has recently been under discussion by various physicians and organizations interested in the efforts now being made by the United States Public Health Service toward limiting the further spread of the venereal infections.

The Public Health Service defines the exact part "early treatment" has in the general plan in "Instructions to Medical Officers in Charge of State Control of Venereal Diseases", Miscellaneous Publication No. 19, reading as follows:—

"Administration of early or prophylactic treatment: It is not designed to establish prophylactic or early treatment stations primarily as such, but all clinics should be prepared to intelligently administer this treatment to voluntary applicants who give a history of exposure within a few hours immediately preceding their application".

"Every extramarital intercourse is to be regarded as an exposure to venereal infection, and the so-called *prophylactic* treatment is really *early* treatment given without waiting for definite diagnosis."

"Such treatment is very efficacious in preventing the development of venereal infections if given within the first hour after exposure. Its value rapidly diminishes from then on, and when four hours have elapsed since the exposure it is of very little usefulness. It should, however, with this understanding, be given up to at least 10 hours after exposure. . . . It should always be remembered that complete control of the patient is necessary in order to obtain satisfactory results from early or prophylactic treatment."

On March 24th a circular letter on this subject was issued by the bureau to all venereal disease clinics and State venereal disease control officers, reading as follows:—

"Your attention is invited to paragraph 10 on page 11 of Miscellaneous Publication No. 19, relative to the administration of early or prophylactic treatment.

"In addition to requesting all persons giving a history of exposure to report at the clinics for re-examination during the period specified, a memorandum record should be made of those calling for treatment. Each person should also be furnished with the circular of information given to infected persons, that he may be fully informed as to the dangerous nature of the venereal diseases.

"Upon the completion of the period of observation, the office memorandum relative to the administration of early treatment should be

*Reprinted from *The Medical Officer*, July 5th, 1919.

destroyed, and the report at the end of the month should show the number of persons given early treatment. No permanent record should be kept of the names and addresses of those treated and observed, unless a venereal infection should develop, in which case, of course, they would be reported and treated as would be any other venereally-infected persons."

Persons requesting "early treatment" who develop venereal infections are reported by the clinic to the State health authorities in accordance with law, and are brought under control to prevent the spread of infection in the same manner as are other patients of the clinic.

The general plan for venereal disease control is grouped under three headings:—

1. *Medical measures.*—The establishment of clinics, securing hospital facilities for venereally-infected persons; making available laboratory facilities for the scientific diagnosis of venereal diseases; securing wide distribution of arsphenamine or similar products; obtaining the support of the entire medical profession by reporting their cases to the State board of health in accordance with law; treating venereally-infected persons in accordance with the best modern methods; and securing the co-operation of druggists in refusing to dispense venereal nostrums and directing prospective purchasers of such remedies to venereal disease clinics or reputable physicians.

2. *Law-enforcement measures.*—Encouraging the closing of restricted districts; stimulating local authorities to carry on energetic campaigns for the suppression of clandestine prostitution in all its forms; co-operating with local authorities with a view of rehabilitating venereally-infected persons; commitment to institutions of venereally-infected feeble-minded persons; and creating in each community public sentiment for the enforcement of existing laws and ordinances tending to better civic conditions or for prompt enactment of needed legislation.

3. *Educational measures.*—The dissemination of information by leaflets, lectures, and other means for the purpose of warning everyone of the serious nature of the venereal diseases, informing them that the method of spread of these diseases is by personal contact with infected persons, and urging continence as the only safe procedure for avoiding infection.

These measures have already resulted in decreasing the number of exposures to venereal infections. Yet sex attraction is one of the fundamental instincts of the human race, and some persons will continue to expose themselves to the infection of these communicable diseases. The community is entitled to the protection given by prompt "early treatment" in preventing the development of these potential foci of venereal infections, while it is, in the meantime, strengthening the other medical and civic measures of prevention which the condition may require.

What to Teach About Parenthood and How to Teach It*

By DR. MARGARET PATTERSON.

National Secretary, Social Education Department, Young Woman's Christian Association of Canada.

ONE of the most hopeful signs of the times is a growing dissatisfaction with the present method of teaching life truths, and the recognition that to our silence and "mock modesty" much of the misery and physical unfitness of to-day is due. Health is beginning to be valued not only as a personal, but a national asset. In this age of efficiency, it is the physically fit who are wanted to fight in the cause of civilization, of reconstruction, of education, of national and world progress. One cannot be physically fit without having a reverent understanding of their body. Only instruction can give this. "Knowledge is power." The results of this lack of instruction are too evident in the perverted curiosity that brings such crowds to see the questionable "movie" or sensuous play. Only a lack of knowledge of the human body could produce such a lack of respect for this "temple of the spirit" as the modern fashionable attire, which not only injures one's own health, but lowers the moral standards of all around. Whether or not children should be taught the truth in regard to the fundamental facts of life is no longer a disputed question. All thinking people recognize the need of safeguarding the children by education, clear, strong and universal. Only in the clear light of truth, can we see what clean true living is. Upon this education will depend, more than upon any other thing, the vigor, health, and stamina, of our nation. That education can elevate and purify, has been forcefully demonstrated by the fact that in the state of Oregon, where for some time past the facts of sex, the natural laws controlling sex, and the consequences of breaking these laws, have been taught sanely and fully by the State, the venereal infections were only 56 out of 10,000 men called up for military service, while in some other states, where instruction had not been given, the infections were 300 out of 10,000. A noted Professor of Biology, has said, "To pass on the torch of life, not only undimmed, but even

* Read at the Annual Meeting of the Hygiene and Public Health Section of the Ontario Educational Association, April 23rd, 1919.

brighter from generation to generation, is the highest service which parents can possibly render, to their time and to their Country." Many parents fain would do this, but they are ignorant of the significance of the essential facts of the reproductive process, and have no scientific knowledge or vocabulary in which to express themselves. Only education can correct this, or fit the parent to give a truthful scientific explanation when a child seeks to know the source of its being. If a child cannot get this information from his parents, he should be given it by his teachers. Our main hope is through the schools—reach the young and work for the future. Is it too much to hope that the next generation of teachers and parents will be fitted to deal with this problem much more wisely than we have been.

There are two very definite sides to the sex education of young children. There is the very intimate side which could only be done properly at home, and there is the impersonal, biological side which could very well be done at school. There is no reason why the two should conflict. The first point to start with is to get our moral backbone, and to arouse in the young child a conception of the dignity and worth of the human body. If the children are to be saved from a filthy philosophy of sex, hard to eradicate, and which may make wholesome instruction almost impossible, we must begin early and safeguard them with really true to nature instruction, wholesome, adequate, and reverent. In order that this may be accomplished, we need to give sane and wholesome courses dealing with this subject, in all normal schools, colleges and everywhere that teachers and leaders of the young are being trained. Our real point of contact should be the young child. Moral education must begin with the pre-adolescent child. If we can develop in a child a real moral sense that will differentiate between right and wrong, and appreciate the power of self-control, it is perfectly possible to develop on that basis a real solid health ideal of immense value later on. With very young children, it is a question of life, not of sex, and the really important thing is to satisfy their curiosity in a way that appeals to their intellect, and gives a reverent outlook on life. It is very important that the teaching should begin as soon as a child asks questions, or is old enough to take simple nature study. All life comes from an egg. Study the eggs of plants, flowers, fishes, fowls. If possible, incubate twenty-one eggs in the school, and break one each day, and notice the development of the chick. A very fascinating book to read to children in the primary school, is "The Cradle Ship" by Edith Howe. Not only

does this teach high ideals of parenthood, but much valuable information is given. In plant study, especially in connection with flowers, we lay a broad foundation for the study of production, and introduce terms like egg cell, fertilization and embryo terms which later are employed in considering the reproduction processes of insects, fishes, frogs, and birds. For older children our instruction should come naturally as a part of the Biology, Physiology and Hygiene. The child of twelve should have a clean-cut, simple conception of the biological laws of life. He should have this knowledge in such an impersonal way that he takes it for granted, just as he takes anything else in nature for granted, and recognizes that he is just one link in this great chain of life, and that the laws which govern him, govern all life. The mere facts of sexual reproduction, after all, play a comparatively small part in sexual education. If we start young enough and tell the truth without any self-consciousness or evasion, I do not think that we can go far wrong. If such books as "John's Vacation", "Life's Beginnings", "The Doctor's Daughter", by Dr. Winfield S. Hall, are followed, a child cannot help but have a wholesome respect for his body and a reverence for the reproduction of life. It cannot be too strongly emphasized that the instruction had better be given a year too soon than a day too late, and that the teacher must have his own mind clear on the subject, and be able to present it as any other subject is presented.

The Social Background.

Social Medicine

Taken from a Bulletin, entitled: "Standards of Child Welfare," issued by the United States Department of Labor

Dr. Sand gave this address before The Children's Bureau Conference, May-June, 1919

I SHOULD like to say a few words about the general principles on which we ought to lay the foundations for the laws concerning child welfare we all wish to introduce, and about the best way to secure their enforcement. I think you all agree that laws have to be based on science and experience, more than on sentiment or party lines. Yet this has been very rarely the case. Interests and prejudice play an important part, I am afraid, in forming public opinion. There is not much room left for science.

At this moment, however, things look distinctly more hopeful. The war has taught us to question all our methods, and to ask for better efficiency. Now, efficiency means a scientific organization, and co-operation. Those two factors have really won the war. Think what improvements our munition factories, our army, the life of the nation at large, have shown in the last four years. The scientific and the co-operative spirit have made the whole difference and have achieved wonders.

If you try to pervade our peace activities with those elements of success, we strike at two very paradoxical facts. The first is that the human-saving science has not kept pace with the other sciences. We have gathered a few facts only about eugenics, about the physiology of labour, about the factors affecting the growth of children, all things of first-class importance for our prosperity and happiness. But sciences like archaeology (I do not want to attack the archaeologists; I have a number of friends in that branch) loom large in our museums and publications, at least in Europe, although they cannot boast the same usefulness. It seems that instead of doing the urgent job first, mankind has always preferred to begin with the less important task.

That is already bad enough. But here comes the second point: the utilization of science has not kept pace with its advance. Professor Frederick S. Lee has told us so in a recent book, in which he shows what we know about the working of the human machine, and the little use to which that knowledge has been put. You could take other examples; we know perfectly well how to eradicate malaria and yellow fever, yet

these diseases still claim many victims. We know that we could prevent half of the deaths which occur every year, and yet we do not prevent them. Thirty per cent. of our blind infants would see if only a few drops of an antiseptic solution were put in the eyes of every newborn child.

The reason of all those deficiencies is that there is no programme for the scientific organization of mankind, no agency to study such a programme, no teaching given on the matter. I think we will never reach the point where we will really govern ourselves and master the world, until we make the universities constructive. It is from these centres that the law ought to originate, and not from the political associations.

A university is not primarily a place where young men play foot-ball and learn Greek or mathematics; neither is it primarily a school for lawyers or physicians, nor a place where an expert studies at leisure, in a comfortable environment, some old Assyrian inscription. These activities are very valuable and necessary. But we must put foremost a higher and more general purpose; the building up of civic and human efficiency. The constructive university will not include many more sciences than it does now, but it will teach them from another viewpoint.

Let us take, for instance, public health. We tell our undergraduates how to prevent tuberculosis by avoidance of contact, a well-balanced diet, a comfortable home, and rest. Very well. But we do not tell them how to provide those things. I would have public health taught in a way that would strike at the root of the question and proclaim, as Surgeon General Gorgas did, that the public-health measure you can introduce is a minimum wage law. I would have hygiene studied not only in the laboratory; I would take the undergraduates to the working-man's home and ask him and his wife about their needs and the reforms they themselves suggest.

In short, I would go a step further than preventive medicine, and teach sociologic medicine. There is a field between sociology, statistics, biology, medicine, and philanthropy, which is a kind of no man's land. Some patrols start from the biology border, explore a little stretch, and then come back. The same occurs from all the borders. When two patrols, coming from different borders, meet each other, they sometimes fraternize; more often there is a big scientific fight. I do not mind very much this kind of fighting after having seen the other kind.

The worst feature is that the patrols seldom meet, and so every bit of knowledge which one border gains about no man's land is lost for the others. There is no co-ordination of effort, no planning together, no team work.

I think this could be avoided and a real need be met if we started frankly to organize that field under the auspices of Sociologic Medicine.

Sociologic Medicine means the medical end of social questions, or the social end of medical questions, as you prefer to put it. It would have been constituted long ago were it not for the fact that it requires teaching biological, statistical and social methods to the physicians. Now, biological methods the actual or future physician will accept without great trouble. There will be more resistance to statistical methods; they need the use of higher mathematics, and fumbling about in terrible books like the Census. But even that, the better type of undergraduates or doctors will finally admit, on account of the scientific stamp that statistics receive from mathematics. When it comes, however, to sociological methods, the average medical man revolts; surveys, inquiries, social case work, all seem too humane to be scientific. And then they mix up with all sorts of social questions, nearly related to political questions. That is a slippery field.

And yet we have got to plough this field, and it will give us the richest crop that science has ever reaped, because then we will no more guess, we will know about the social questions. Marriage, child welfare, education, vocational guidance, labour, poverty, delinquency, all those problems have to be taken up by sociologic medicine. If this new science is comprehensive enough, if it is recognized and developed, I have no doubt results will follow quickly.

A conference like this where public officials, social workers, physicians, sociologists, and teachers meet together is already a step toward the reclamation of this common field. The school of industrial medicine organized recently at Harvard is another very valuable progression in that direction.

We constituted in Belgium in 1913 an association of sociologic medicine which published a bulletin (*Bulletin de L'Association Belge de Médecine Sociale Bruxelles*) and it was progressing favourably. Sociologic medicine was taught in our universities to doctors who wanted to take the public-health diploma. But war has nipped those activities in the bud. We will have to take them up again, however, as they will not only help toward making better laws, but also assist us toward enforcing them in an easier and more effective way. Constructive democracy means scientific democracy.

Report of the Executive Meeting of the Ontario Medical Association held in the Academy of Medicine, Toronto, on Wednesday, September the 24th, 1919

AT this meeting of the Executive, many matters of interest to the medical profession in Ontario, were discussed and arranged.

Pursuant to instructions laid down at the last Annual Meeting of the Association, the Executive divided the Province of Ontario into ten Counsellor Districts. This step was deemed advisable in order that each Counsellor might have a territory which would enable him to render the best service to the profession in general and the Association in particular.

The following is a list of the Executive as now constituted: President, Dr. F. W. Marlow, Toronto; 1st Vice-President, Dr. J. H. Mullin, Hamilton; 2nd Vice-President, Dr. J. H. Farley, Trenton; Hon. Treasurer, Dr. G. Stewart Cameron, Peterboro; Hon. Secretary, Dr. T. C. Routley, Toronto; Dr. J. A. Macgregor, London; Dr. E. R. Secord, Brantford; Dr. George S. Burt, Owen Sound; Dr. J. P. Morton, Hamilton; Dr. D. A. Clarkson, Toronto; Dr. T. S. Farncomb, Trenton; Dr. H. A. Boyce, Kingston; Dr. Fenton Argue, Ottawa; Dr. Edgar Brandon, North Bay; Dr. E. B. Oliver, Fort William.

It was also decided at this Meeting that the Fortieth Annual Meeting of the Ontario Medical Association would be held in Toronto on May 26th, 27th and 28th, with the Committee on General Purposes meeting on May 25th.

With regard to University Post Graduate Extension Courses, it was decided to advise the Committee in charge of this Department to at once get into communication with the various Medical Faculties and the profession at large, in order that much good may accrue to the profession through this Department. Members of the profession have already been selected to address District and County Society Meetings and it is hoped that in the very near future a Bureau will be established in the Secretary's Office which may be utilized by all local societies desiring the services of outside men to address them.

At an early date each County and Local Society will receive definite instructions, accompanied by an application form for affiliation with the Ontario Medical Association, and it is particularly hoped that every Society will give this important matter the attention which it deserves.

In order that the profession may be kept properly informed as to the activities of the Ontario Medical Association and the work of its Executive during the year, it was decided to have the report of the last Business Meeting of the Association printed for distribution to the Country Societies, and also to have synopses of the points of interest decided at Executive Meetings forwarded to the various Medical Journals for publication.

T. C. ROUTLEY, *Secretary*.

F. W. MARLOW, *President*.



The Provincial Board of Health of Ontario

Re Diphtheria Carriers

Toronto, September 25th, 1919.

Sir—

In reply to your telephone enquiry as to what should be your policy M.H.O. in respect to diphtheria cases and carriers, I should advise:

(1) If the patient is well, and there are no sore throat, nasal or oral discharges, he may return to school after three weeks, or,

(2) If after twelve days two negative swabs with a twelve hour interval are shown to the satisfaction of the M.O.H. he may return to school.

(3) Carriers should not be allowed to return to school or mix with the community until free of infection.

(4) Other children in the family and other members of the family who are not carriers may be allowed to attend school or go about their work from a household where there is a diphtheria carrier.

I have the honour to be, Sir,

Your obedient servant,

CHIEF OFFICER OF HEALTH.

The New Public Health Act of South Africa—Conscience Clause Abolished

In the new Health Act of South Africa, the vaccinationists have scored a victory, the conscience clause was deleted in the Senate by 13 votes to 6 and in the Assembly by 48 to 26.—(*Lancet*, Aug. 9th).

Score one for the intelligence of our South African cousins!

Comparison of the Typhoid Deaths in Ontario in 1918 as compared with those of 1910

The following table shows the typhoid deathrate of Ontario per 100,000 of population since 1908.

	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
County.....	20.5	25.1	22.0	16.1	10.9	13.3	10.0	9.45	8.1	6.58	5.09
City.....	37.8	34.3	51.5	35.8	27.7	17.3	12.4	9.43	12.1	7.5	9.6
Towns.....	107.1	67.7	56.4	62.3	47.0	46.0	47.4	38.0	52.2	31.4	17.2
Average for Province.....	29.7	29.9	31.5	25.3	18.7	16.7	13.5	10.7	12.5	8.4	7.52

The foregoing table shows an annual saving of 454 lives from typhoid fever from 1910 to 1918.

These results have been secured largely because of the success of the Board's efforts in securing pure water, by the means of filtration plants, chlorination, and by the use of typhoid vaccine.

ESTIMATED COST OF THE WORK SUPERVISED BY THE BOARD.

1915.....	\$4,679,496.94
1916.....	2,010,070.42
1917.....	2,880,534.72
1918.....	1,590,658.39

What does the saving of these 454 lives mean?

Prof. Whipple, in charge of Sanitary Engineering in Harvard University estimates the value of a life between 15 and 35 (the commonest group age for typhoid) at \$4,600

$$454 \times \$4,600 = \$2,088,400.$$

Every death from typhoid means 15 others ill of the disease but who recover with the loss of one to two months of time and a doctor's bill

$$454 \times 15 \times 300 \dots\dots\dots \$2,043,000$$

$$\text{Grand total saved to the Province in 1918} \dots\dots\dots 4,131,400$$

All this has been accomplished at an expense to the province of less than \$10,000 a year.

Cases and Deaths from Communicable Diseases reported by Local Boards of Health for the Month of September, 1919.

COMPARATIVE TABLE.

Diseases	1919		1918	
	September		September	
	Cases	Deaths	Cases	Deaths
Smallpox.....	48	1	6	0
Scarlet Fever.....	187	4	187	3
Diphtheria.....	291	36	351	52
Measles.....	51	1	188	4
Whooping Cough.....	141	9	72	31
Typhoid Fever.....	101	31	111	31

COMPARATIVE TABLE—Cont.

Diseases	1919 September		1918 September	
	Cases	Deaths	Cases	Deaths
Tuberculosis.....	105	93	259	181
Infantile Paralysis.....	9	0	2	0
Cerebro-spinal Meningitis.....	6	5	6	4
Influenza.....	0	10	0	0
Acute-Primary Pneumonia.....	0	79	0	0
	939	269	1182	306

(Note.—The last two diseases were not reported in 1918).

VENEREAL DISEASES REPORTED BY MEDICAL OFFICERS OF HEALTH FOR
SEPTEMBER 1919.

	SEPTEMBER 1919 Cases	SEPTEMBER 1918 Cases
Syphilis.....	115	114
Gonorrhœa.....	151	246
Chancroid.....	7	7
	273	367

(Note.—Three deaths from Syphilis.)

SMALLPOX CASES REPORTED FOR SEPTEMBER, 1919.

	Cases	Deaths
Toronto.....	1	0
Brantford.....	1	0
Ottawa.....	2	0
Chatham.....	4	0
Woodstock.....	3	0
Napanee.....	1	0
Peterboro.....	7	0
Windsor.....	1	0
North Bay.....	1	0
Smithville.....	2	0
Cochrane.....	2	0
Kelso.....	1	0
Iroquois Falls.....	1	0
Winchester Tp.....	5	1
Martland Tp.....	4	0
Vespra Tp.....	1	0
Smith Tp.....	1	0
Field Tp.....	6	0
Marmora Tp.....	1	0
Onondaga Tp.....	2	0
Grimsby North Tp.....	1	0
	48	1

News Items

The inaugural meeting of the Federal Council of Health, created under the Act establishing the Federal Department of Health was held in Ottawa on October 7th, 8th and 9th. The Deputy Minister of Health, Dr. John A. Amyot, C.M.G., Chairman of the Council, presided at the several sessions. The following are the members of the Council: Dr. J. W. S. McCullough, Chief Officer of Health for Ontario; Dr. M. M. Seymour, Regina, Commissioner of Health, Saskatchewan; Hon. Dr. Wm. F. Roberts, Minister of Health, New Brunswick; Dr. H. E. Young, Secretary of the Provincial Board of Health, British Columbia; Dr. W. H. Hattie, Provincial Health Officer, Nova Scotia; Dr. W. C. Laidlaw, Provincial Health Officer, Alberta; Dr. E. Pelletier, Secretary, Superior Board of Health, Quebec; and Dr. Gordon Bell, Secretary, Provincial Board of Health, Manitoba. Prince Edward Island was not represented. There are five additional members of the Council, these are: Miss Helen R. Y. Reid, Montreal, representing Child Welfare and Social Service Agencies; Mrs. Todd, representing Canadian Women's Institutes; W. R. Rollo, M.P.P., representing Organized Labour; W. F. Stephens, representing Agricultural interests, and Dr. J. G. Fitzgerald, Professor of Hygiene, University of Toronto.

The topics discussed included: A plan for combating Venereal Diseases; Measures to combat Influenza; Questions relating to Habit Drugs, and the very important topics of Industrial Hygiene, Conservation of Child Life and Rural Hygiene.

The matter of the distribution of the \$200,000 voted by the Dominion Government was discussed and it was recommended that \$10,000 be appropriated by the Federal Department of Health for Venereal Disease supervisory work; that \$10,000 be granted to the Canadian National Council for Combating Venereal Diseases, for educational and propaganda work; and that the balance be divided amongst the provinces, in proportions based on the population of each province; on condition that each province vote a like sum for the same work. This it is hoped will mean that nearly \$400,000 will be spent in the Dominion during the year in Venereal Diseases, public health work.

It is anticipated that meetings of the Federal Council of Health be held about every six months.

Dr. J. G. Fitzgerald has been appointed Professor of Hygiene in the University of Toronto in succession to Dr. John A. Amyot, C.M.G., resigned, to accept the office of Deputy Minister of Health, Federal

Department of Health, Ottawa. Dr. Fitzgerald will also continue to act as Director of the Connaught Antitoxin Laboratories.

The curriculum leading to the Diploma in Public Health, in the University of Toronto, has been so amended, that those who are engaged in full-time public health work, and have been so engaged for a period of at least two years, may register and carry on the required work until the necessary courses have been completed, even though part-time work in two or more Academic years is required. Further information may be obtained on application to the Secretary, Faculty of Medicine, University of Toronto, Toronto.

Major Harold Orr, O.B.E., C.A.M.C., has recently returned after several years service Overseas. Major Orr acted as Sanitary Officer to the Shorncliffe Area, later he commanded a Sanitary Section in France; subsequently he was Assistant to the A.D.M.S. Sanitation British Armies in France, and finally was Sanitary Adviser to the D.M.S Overseas Military Forces of Canada, in London.

Captain D. Cameron Lohead, D.P.H., of Gull Lake, Saskatchewan, has returned from Overseas service.

An important announcement by the Association of the revision of the Membership Roll is to be found on page XVI of the Advertising Section.

Editorial

The Coming of Utopia

THE great world war with all its tragedies and wastage of human accomplishment and life has ended, and during a year civilization has been slowly struggling back to old conditions. The right has won. A sadly battered democracy slowly rises to gird up her loins to pass with increasing speed to her ultimate shining goal.

Men and women the world over look forward to the day when freedom will be more than a name—when opportunity will be for the many rather than the few, when the happiness and development to the full of the average individual shall be the main interest of the state—when the crass individualism (call it selfishness if you will) normally characteristic of past ages will die the death which advancing civilization renders inevitable.

Citizenship should carry it, responsibilities and rights—and no privileges. Too much in the past the state has interested itself in the state. A purely materialistic ambition has led to turning a blind eye to the fact that, after all the full development of the human being himself is the state's greatest interest. To permit individualism to develop to the extent that success in life depends mainly on the success with which one man defeats the ends of another is a dangerous policy indeed and the idea of "every man for himself and the devil tak' the hindmost" is falling more into disrepute every day.

The state must realize its responsibility to the individual. The individual must realize his duty to the state and his neighbour—not only in war time but always. An eminent American statesman of conservative tendencies speaking in Toronto a year ago said that the first duty of a university was to reach its students citizenship. A great English statesman said once that the first interest of a statesman was the health of the people. When both of these ideals are realized, when state, university and people work to the end that man himself shall attain the height of his mental, moral, physical, and spiritual possibilities, then indeed a piping Utopia will have come and for an eon or two we can rest.

Diphtheria Deaths

The unnecessary and preventable deaths from diphtheria continue to be reported in large numbers. As frequently pointed out in the JOURNAL this is an indication that the education of the general public

as to the danger of neglect in calling a physician in cases of seemingly mild sore throat, has not been sufficiently general or thorough. All preventable deaths are lamentable, none more so than those which can be absolutely controlled by means now in our hands. Public Health educators, physicians, public health nurses and social workers, should all combine to bring home to every man, woman and child in the community, the fact that diphtheria deaths can be absolutely prevented, not only in the future but right now, if everyone is in possession of the few simple facts reiterated every month in the JOURNAL.
